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EXAMINER	
MATTIS, JASON E	

ART UNIT	PAPER NUMBER
2461	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/988,467	Applicant(s) SCHURIG ET AL.	
	Examiner JASON E. MATTIS	Art Unit 2461	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 30 November 2010.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8,10,12,14,17-23,25-31,40-44,47-50,52 and 54-57 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 1-8,10,12,14 and 40-44 is/are allowed.

6)☒ Claim(s) 17-22,47,50,52 and 54-57 is/are rejected.

7)☒ Claim(s) 23,25-31,48 and 49 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the Amendment filed 11/30/10. Claims 9, 11, 13, 15, 16, 24, 32-39, 45, 46, 51, and 53 have been canceled. New claims 56 and 57 have been added. Claims 1-8, 10, 12, 14, 17-23, 25-31, 40-44, 47-50, 52, and 54-57 are currently pending in the application.

Claim Objections

2. Claims 23, 25-31, 48, and 49 are objected to because of the following informalities:

Regarding claim 23, lines 6-7 of this claim include a limitation stating "when the second portion is configured to carry power". This limitations appears to included a typo using the word “when" instead of the word “wherein”. It is recommended that the word “when” be changed to “wherein”.

Claims 25-31, 48, and 49 are objected to since they depend on claim 23.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 17, 47, 50, 52, 54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosaka et al. (U.S. Patent US 6,448,500 B1) in view of Leyba et al. (U.S. Patent US 6,276,502 B1), Iseli et al. (U.S. Publication US 2005/0083784 A1), and Beinhaur et al. (U.S. Patent 4,834,673).

With respect to claim 17, Hosaka et al. discloses a cable comprising a first section including at least four unshielded twisted-wire pairs configured to carry data between first and second network devices coupleable to opposing first and second ends of the cable **(See column 1 lines 6-10, column 1 lines 31-48, and Figure 4 of Hosaka et al. for reference to a cable having six pairs of balanced unshielded twisted pair wires 41 for signal transmission between electronic equipment coupled to ether end of the cable)**. Hosaka et al. also discloses a second section including at least a pair of insulated wires configured to carry power from the first network device to the second network device **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to a pair of power supply wires 32 surrounded by an insulating external coating 34 to carry power between the electronic equipment)**. Hosaka et al. discloses a weather-resistant outer sheath surrounding at least the first and second section **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to the insulating external coating 34 being a weather-resistant outer sheath surrounding the balanced unshielded twisted pair wires 31 and the power supply pair wires 32)**. Hosaka et al. does not specifically disclose first and second connectors

respectively terminating the first and second sections at the first end of the cable. Hosaka et al. also does not specifically disclose the cable being greater than 100 meters in length with power wires between 10 and 16 gauge and carrying data at 100 Mbps. Hosaka et al. further does not specifically disclose the cable carrying a current up to 60 amperes.

With respect to claim 17, Leyba et al., in the field of communications, discloses a cable with separate power and data connectors located at either end of the cable **(See column 5 line 24 to column 6 line 23 of Leyba et al. for reference to a cord 10 including an electrical power connector 28 and a data connector 32 at the other end respectively terminating power conductors 12 and data transmission conductors 14 of the cord 10)**. Using a cable including separate power and data connectors located at either end of the cable has the advantage of allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Leyba et al., to combine using a cable with separate power and data connectors, as suggested by Leyba et al., with the system and method of Hosaka et al., with the motivation being to allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

With respect to claim 17, Iseli et al., in the field of communications, discloses a cable being greater than 100 meters in length **(See page 3 paragraph 37 and Figure 3**

of Iseli et al. for reference to an Ethernet cable, which inherently carries both power and data, having a length of over 400 meters, which is greater than 100 meters). Iseli et al. also discloses the cable carrying data at 100 Mbps **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to the cable replacing a standard 100 Mbit Ethernet cable to support 100 Mbit Ethernet of a greater distance)**. Using a cable having such characteristics has the advantage of extending the range of power and data distribution when compared to conventional Ethernet cables **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to this advantage)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Iseli et al., to combine using a cable as disclosed by Iseli et al. with the system and method of Hosaka et al. and Leyba et al., with the motivation being to extend the range of power and data distribution.

With respect to claims 17 and 47, the combination of Hosaka et al., Leyba et al., and Iseli et al. does not specifically disclose carrying a current up to 60 amperes using a cable with a gauge between 10 and 16. The exact ampere rating and gauge of a cable used to supply power is an obvious design choice must be made when implementing a wired network. Beinhaur et al., in the field of communications, discloses the use of a power cable of sufficient gauge, i.e. to support currents up to 60 amperes **(See column 3 lines 38-42 and column 6 lines 37-52 of Beinhaur et al. for reference to a power cable with a current rating of 100 amps and a conductor cable of 10-12 gauge)**. Thus, it would have been an obvious design choice for one of

ordinary skill in the art at the time of the invention to combine using a cable that is a of sufficient gauge to support currents up to 60 amperes, such as a cable having properties similar to the cable disclosed by Beinhaur et al., with the system and method of Hosaka et al., Leyba et al., and Iseli et al., with the motivation being to connect devices that require power to be delivered up to a maximum of 60 amperes.

With respect to claim 50, Hosaka et al. discloses a cable comprising a first section including at unshielded twisted-wire pairs configured to carry data between first and second network devices coupleable to opposing first and second ends of the cable **(See column 1 lines 6-10, column 1 lines 31-48, and Figure 4 of Hosaka et al. for reference to a cable having six pairs of balanced unshielded twisted pair wires 41 for signal transmission between electronic equipment coupled to ether end of the cable)**. Hosaka et al. also discloses a second section including at least a pair of insulated wires configured to carry power from the first network device to the second network device **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to a pair of power supply wires 32 surrounded by an insulating external coating 34 to carry power between the electronic equipment)**. Hosaka et al. discloses an outer sheath surrounding at least the first and second section **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to an insulating external coating 34 surrounding the balanced unshielded twisted pair wires 31 and the power supply pair wires 32)**. Hosaka et al. does not specifically disclose first and second connectors respectively terminating the first and second sections at the first end of the cable. Hosaka et al. also does not specifically disclose the cable being

greater than 100 meters in length with power wires between 10 and 16 gauge and carrying data at 100 Mbps.

With respect to claim 50, Leyba et al., in the field of communications, discloses a cable with separate power and data connectors located at either end of the cable **(See column 5 line 24 to column 6 line 23 of Leyba et al. for reference to a cord 10 including an electrical power connector 28 and a data connector 32 at the other end respectively terminating power conductors 12 and data transmission conductors 14 of the cord 10)**. Using a cable including separate power and data connectors located at either end of the cable has the advantage of allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Leyba et al., to combine using a cable with separate power and data connectors, as suggested by Leyba et al., with the system and method of Hosaka et al., with the motivation being to allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

With respect to claim 54, Hosaka et al. does not disclose the cable being greater than 300 meters in length.

With respect to claims 50 and 54, Iseli et al., in the field of communications, discloses a cable being greater than 300 meters in length **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to an Ethernet cable, which inherently**

carries both power and data, having a length of over 400 meters, which is greater than 100 meters). Iseli et al. also discloses the cable carrying data at 100 Mbps **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to the cable replacing a standard 100 Mbit Ethernet cable to support 100 Mbit Ethernet of a greater distance)**. Using a cable having such characteristics has the advantage of extending the range of power and data distribution when compared to conventional Ethernet cables **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to this advantage)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Iseli et al., to combine using a cable as disclosed by Iseli et al. with the system and method of Hosaka et al. and Leyba et al., with the motivation being to extend the range of power and data distribution.

With respect to claims 50 and 54, the combination of Hosaka et al., Leyba et al., and Iseli et al. does not specifically disclose carrying a current using a cable with a gauge between 10 and 16. The exact ampere rating and gauge of a cable used to supply power is an obvious design choice must be made when implementing a wired network. Beinhaur et al., in the field of communications, discloses the use of a power cable of sufficient gauge, i.e. to support currents up to 60 amperes **(See column 3 lines 38-42 and column 6 lines 37-52 of Beinhaur et al. for reference to a power cable with a current rating of 100 amps and a conductor cable of 10-12 gauge)**. Thus, it would have been an obvious design choice for one of ordinary skill in the art at the time of the invention to combine using a cable that is a of sufficient gauge to support

currents up to 60 amperes, such as a cable having properties similar to the cable disclosed by Beinhaur et al., with the system and method of Hosaka et al., Leyba et al., and Iseli et al., with the motivation being to connect devices that require power to be delivered up to a maximum of 60 amperes.

With respect to claim 52, Hosaka et al. discloses a power and data distribution cable comprising a first section including at unshielded twisted-wire pairs configured to carry data between first and second network devices coupleable to opposing first and second ends of the cable **(See column 1 lines 6-10, column 1 lines 31-48, and Figure 4 of Hosaka et al. for reference to a power and data distribution cable having six pairs of balanced unshielded twisted pair wires 41 for signal transmission between electronic equipment coupled to ether end of the cable)**. Hosaka et al. also discloses a second section to carry power from the first network device to the second network device **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to a pair of power supply wires 32 surrounded by an insulating external coating 34 to carry power between the electronic equipment)**. Hosaka et al. discloses an outer sheath surrounding at least the first and second section **(See column 1 lines 31-48 and Figure 4 of Hosaka et al. for reference to an insulating external coating 34 surrounding the balanced unshielded twisted pair wires 31 and the power supply pair wires 32)**. Hosaka et al. does not specifically disclose first and second connectors respectively terminating the first and second sections at the first end of the cable. Hosaka et al. also does not specifically disclose the cable being greater than 100 meters in length and carrying data at 100 Mbps.

Hosaka et al. further does not specifically the second section including a coaxial cable of sufficient gauge to support current up to 60 amperes.

With respect to claim 52, Leyba et al., in the field of communications, discloses a cable with separate power and data connectors located at either end of the cable **(See column 5 line 24 to column 6 line 23 of Leyba et al. for reference to a cord 10 including an electrical power connector 28 and a data connector 32 at the other end respectively terminating power conductors 12 and data transmission conductors 14 of the cord 10)**. Using a cable including separate power and data connectors located at either end of the cable has the advantage of allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Leyba et al., to combine using a cable with separate power and data connectors, as suggested by Leyba et al., with the system and method of Hosaka et al., with the motivation being to allow both data and power to be flexible coupled from the cable to different connectors of devices on either end of the cable.

With respect to claims 52 and 55, Hosaka et al. does not disclose the cable being greater than 300 meters in length.

With respect to claims 52 and 55, Iseli et al., in the field of communications, discloses a cable being greater than 300 meters in length **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to an Ethernet cable, which inherently**

carries both power and data, having a length of over 400 meters, which is greater than 100 meters). Iseli et al. also discloses the cable carrying data at 100 Mbps **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to the cable replacing a standard 100 Mbit Ethernet cable to support 100 Mbit Ethernet of a greater distance)**. Using a cable having such characteristics has the advantage of extending the range of power and data distribution when compared to conventional Ethernet cables **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to this advantage)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Iseli et al., to combine using a cable as disclosed by Iseli et al. with the system and method of Hosaka et al. and Leyba et al., with the motivation being to extend the range of power and data distribution.

With respect to claims 52 and 55, the combination of Hosaka et al., Leyba et al., and Iseli et al. does not specifically disclose carrying a current of 60 amperes using a cable with a gauge between 10 and 16. The exact ampere rating and gauge of a cable used to supply power is an obvious design choice must be made when implementing a wired network. Beinhaur et al., in the field of communications, discloses the use of a power cable of sufficient gauge, i.e. to support currents up to 60 amperes **(See column 3 lines 38-42 and column 6 lines 37-52 of Beinhaur et al. for reference to a power cable with a current rating of 100 amps and a conductor cable of 10-12 gauge)**. Thus, it would have been an obvious design choice for one of ordinary skill in the art at the time of the invention to combine using a cable that is a of

sufficient gauge to support currents up to 60 amperes, such as a cable having properties similar to the cable disclosed by Beinhaur et al., with the system and method of Hosaka et al., Leyba et al., and Iseli et al., with the motivation being to connect devices that require power to be delivered up to a maximum of 60 amperes.

5. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosaka et al. in view of Leyba et al., Iseli et al., and Beinhaur et al. and in further view of Elms et al. (U.S. Patent 5,677,974).

With respect to claims 18 and 19, the combination of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al. does not disclose a hollow conduit for optical fiber installation having a sheath enclosing the cable and a messenger wire to support installation of the optical fiber.

With respect to claims 18 and 19, Elms et al., in the field of communications, discloses a cable with a hollow conduit for optical fiber installation having a sheath enclosing the cable and a messenger wire to support installation of the optical fiber **(See the abstract and column 3 lines 53-58 of Elms et al. for reference to a hybrid cable having a hollow conduit for optical fiber installation that is enclosed by a sheath and for reference to a pulling ribbon, which is a messenger wire to support installation of the optical fiber)**. Using a cable with a hollow conduit for optical fiber installation having a sheath enclosing the cable and a messenger wire to support installation of the optical fiber has the advantage of allowing optical fiber to be installed in the same cable as electrical wiring.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Elms et al., to combine using a cable with a hollow conduit for optical fiber installation having a sheath enclosing the cable and a messenger wire to support installation of the optical fiber, as suggested by Elms et al., with the system and method of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al., with the motivation being to allow optical fiber to be installed in the same cable as electrical wiring.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosaka et al. in view of Leyba et al., Iseli et al., and Beinhaur et al. and in further view of Aslami et al. (U.S. Patent 5,369,518).

With respect to claim 20, the combination of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al. does not specifically disclose the power section including a ground return line.

With respect to claim 20, Aslami et al., in the field of communications, discloses using a ground return line **(See column 4 lines 19-35 for reference to a cable using an earth ground return path, which is a ground return line)**. Using a ground return line has the advantage of protecting against short circuits.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Aslami et al., to combine using a ground return line, as suggested by Aslami et al., with the system and method of Hosaka et al.,

Leyba et al., Iseli et al., and Beinhaur et al., with the motivation being to protect against short circuits.

7. Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Hosaka et al. in view of Leyba et al., Iseli et al., and Beinhaur et al., and in further view of Lemke (U.S. Patent 4,800,236).

With respect to claim 21, the combination of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al. does not disclose foil sheathing and a drain wire.

With respect to claim 21, Lemke, in the field of communications, discloses a cable with foil sheathing and a drain wire **(See column 7 lines 25-44 of Lemke for reference to a cable with foil sheathing and a drain wire)**. Using foil sheathing and a drain wire has the advantage of protecting a cable against outside interference.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Lemke, to combine using foil sheathing and a drain wire, as suggested by Lemke, with the system and method of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al., with the motivation being to protect a cable against outside interference.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosaka et al. in view of Leyba et al., Iseli et al., and Beinhaur et al. and in further view of Belling (U.S. Patent 3,750,281).

With respect to claim 22, the combination of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al. does not disclose including a suspension line bound to the cable.

With respect to claim 22, Belling, in the field of communications, discloses a cable including a removable suspension line **(See the abstract, column 3 lines 57-59, and Figure 4 of Belling for reference to using a removable suspension wire attached to a cable)**. Using a removable suspension line has the advantage of giving a cable extra support.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Belling, to combine using a removable suspension line, as suggested by Belling, with the system and method of Hosaka et al., Leyba et al., Iseli et al., and Beinhaur et al., with the motivation being to give a cable extra support.

9. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson et al. (U.S. Patent US 7,577,857 B1) in view of Iseli et al.

With respect to claim 56, Henderson et al. discloses an apparatus comprising a network device including at least a first physical layer transceiver **(See the abstract, column 3 lines 51-65 and Figure 1 of Henderson et al. for reference to a computer system, which is an apparatus, comprising a NIC 13, which is a network device, including circuitry that acts as a physical layer transceiver by transmitting and receiving Ethernet packet through a connector 17)**. Henderson et al. also discloses

the physical layer transceiver configured to communicate via a cable including a first set of wires to carry data and a second set of wires to carry power wherein the first in second sets of wires are surrounded by a sheath **(See the abstract, column 3 lines 51-65 and Figure 1 of Henderson et al. for reference to NIC communicating Ethernet packets over an Ethernet cable wherein Ethernet cables are well known to include a first set of wires to carry data and a second set of wires to carry power as well as well known to include a sheath surrounding the wires in many embodiments)**. Henderson et al. further discloses the network device configured to transmit data via the cable at 100Mbps by employing the first physical layer transceiver at a lower than specified clock rate **(See column 5 lines 9-17 and column 7 lines 49-61 of Henderson et al. for reference to dividing down clocks to a slower speed to reduce a data rate of the NIC from 1 Gbps to 100 Mbps)**. Although Henderson et al. does disclose the use of Ethernet, Henderson et al. does not specifically disclose the use of a cable that is over 100 meters in length.

With respect to claim 56, Iseli et al., in the field of communications, discloses an Ethernet cable being greater than 100 meters in length **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to an Ethernet cable having a length of over 400 meters, which is greater than 100 meters)**. Using a cable having such characteristics has the advantage of extending the range of power and data distribution when compared to conventional Ethernet cables **(See page 3 paragraph 37 and Figure 3 of Iseli et al. for reference to this advantage)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Iseli et al., to combine using a cable as disclosed by Iseli et al. with the system and method of Henderson et al., with the motivation being to extend the range of power and data distribution.

10. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson et al. in view of Iseli et al. and in further view of Chung (U.S. Patent 5,857,075).

With respect to claim 57, although the combination of Henderson et al. and Iseli et al. does disclose a NIC having a transceiver that is employed at a lower than specified clock rate **(See the abstract, column 3 lines 51-65, column 5 lines 9-17, column 7 lines 49-61, and Figure 1 of Henderson et al.)** and an Ethernet cable greater than 100 meters in length **(See page 3 paragraph 37 and Figure 3 of Iseli et al.)**, as discussed above, the combination of Henderson et al. and Iseli et al. does not specifically disclose a second physical layer transceiver of the same properties.

With respect to claim 57, Chung, in the field of communications, discloses an apparatus comprising both first and second physical layer transceivers having the same properties **(See column 5 line 56 to column 6 line 30 and Figure 2 of Chung for reference to NIC semiconductor devices 51-53 each including multiple Ethernet transceivers of the same kind)**. Using multiple Ethernet physical layer transceivers has the advantage of allowing a single device to be connected to more than one Ethernet cable at the same time.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Chung, to combine using multiple Ethernet physical layer transceivers, as suggested by Chung, with the system and method of Henderson et al. and Iseli et al., with the motivation being to allow single device to be connected to more than one Ethernet cable at the same time.

Allowable Subject Matter

11. Claims 1-8, 10, 12, 14, and 40-44 are allowed.

12. Claims 23, 25-31, 48, and 49 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

Response to Arguments

13. Applicant's arguments with respect to claims 17-22, 47, 50, 52, 54, and 55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason E Mattis
Primary Examiner
Art Unit 2461

JEM

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